

I Claim:

1. A toothbrush comprising:

a handle having a longitudinal axis;

a toothbrush head, having a longitudinal axis,
integrally formed with the handle;

the toothbrush head having a generally trapezoidal shape with the larger base of the trapezoid located at the distal end of the toothbrush and the narrow base of the trapezoid formed with the handle;

the toothbrush head having a working side with an elongate flat center portion extending along the longitudinal axis of the head and further having a pair of opposed lateral edges disposed on either side of the flat center portion;

a first set of bristles extending from the flat center portion and oriented to extend in a direction generally perpendicular to the flat center portion; and

a second set of bristles extending from each of the lateral edges and oriented in a direction inclined to the perpendicular toward the longitudinal axis of the head.

2. The toothbrush according to claim 1, wherein the lateral edges are formed as elevated flats.

3. The toothbrush according to claim 2, wherein the elevated flats are raised a distance from 1 to 3 mm above the flat center portion.

4. The toothbrush according to claim 1, wherein each of the lateral edges are formed to present an inclined surface extending upward and away from the flat center portion.

5. The toothbrush according to claim 1, wherein the tufts of bristles extending from the lateral edges are inclined from the perpendicular at an angle in the range from between 5 and 30 degrees.

6. The toothbrush according to claim 1 characterized by the fact that the ratio of the length of the bristles of the first set (L_o) to the length of the bristles of the second set (L_v) are defined by the relationship $1.1 < L_o/L_v < 1.8$.

7. The toothbrush according to claim 1, wherein the second set of bristles are arranged in rows extending generally parallel to the longitudinal axis of the head with the angle of inclination of the bristles in the most external rows being greater than the angle of inclination of the bristles in the innermost rows.

8. The toothbrush according to claim 1, wherein the second set of bristles are arranged in tufts with 40 to 60 bristles per tuft and the diameter of the tufts is in the range from 1.7 to 2.8 mm.

9. The toothbrush according to claim 1, wherein the length of the bristles of the second set of bristles are approximately the same length and further characterized by the fact that the distance between the free ends of the bristles projecting from one lateral edge and the free ends of the bristles projecting from the other lateral edge is in the range from 2 to 8 mm.
10. The toothbrush according to claim 1, wherein the longitudinal axis of the handle is co-aligned with the longitudinal axis of the toothbrush head.
11. The toothbrush according to claim 1, wherein the longitudinal axis of the handle is offset by an angle of less than 20 degrees from the longitudinal axis of the toothbrush head.
12. The toothbrush according to claim 1, wherein the handle includes a rounded central area with a diameter (P_c) and two distal areas on either side of the central area with a diameter (P_d) and the ratio of the two diameters is defined by relationship $1.5 < P_c/P_d < 3$.
13. The toothbrush according to claim 12, wherein the diameter P_c is in the range of from 12 to 20 mm.
14. The toothbrush according to claim 1, wherein the toothbrush further includes two oppositely disposed

working sides and each side is the mirror image of the other side.